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Timestamp: [year=2008; month=10; day=17; hr=14; min=55; sec=32; ms=1; ]
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Application No: 09509712          Version No: 1.0

Input Set:

Output Set:

Started: 2008-10-17 14:12:35.466
Finished: 2008-10-17 14:12:37.703
Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 237 ms
Total Warnings: 0
Total Errors: 0
No. of SeqIDs Defined: 127
Actual SeqID Count: 127

<110> APPLICANT: Rubin, Donald H.
      Organ, Edward L.
      DuBois, Raymond N.
<120> TITLE OF INVENTION: Mammalian Genes Involved in Viral
      Infection and Tumor Suppression
<130> FILE REFERENCE: 01123.0004

<140>  CURRENT APPLICATION NUMBER:09509712
<141>  CURRENT FILING DATE:2000-03-31
<150> PRIOR APPLICATION NUMBER: PCT/US98/21276
<151> PRIOR FILING DATE: 1998-10-08
<150> PRIOR APPLICATION NUMBER: 60/062,021
<151> PRIOR FILING DATE: 1997-10-10
<160> NUMBER OF SEQ ID NOS: 127
<170> SOFTWARE: FastSEQ for Windows Version 4.0

<210> SEQ ID NO 1
<211> LENGTH: 925
<212> TYPE: DNA
<213> ORGANISM: Rattus norvegicus
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: 1- 925
<223> OTHER INFORMATION: n = g, a, c or t(u)
<400> SEQUENCE: 1

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    ggttgattgc tcttgaaagg ntttgaggtg naattcctcc gtnagtttga ccgtagtcgg       180
    atntgaagag ggattgttna gcagncataa tttcattccc tgnacaccca gtaacnnttt       240
    accgtcattt ggttgggaat tgatntcggg aggtancaan ggccacagtt atttattgtt       300
    ncggaggatt gcaccaattn ggccggctgc ctctganatc tgtttctcat ccatgccggt       360
    tcacccagac gaaagccgaa agcntcggga gtcctaactn tagtccntga aagtcattcc       420
    cagctgcgta attgggctgt gcagagtccc agctcggtaa atatttgccc cgtgactgag       480
    ctggagagaa tgctcctttc ttggtcctgg gcagctcttg gcagctcaca tgcactgttt       540
    acctatcctc ccacattccc ccctgaggaa tcatcgtgcc tcggttccct taagtcctct       600
    caacagaaaa caaggcagag tggaacgaag gaaagtgcgt ggccgttaga aagcctgtct       660
    cgaatctgtc ccacgtgcct caggtagcgt tccaaacagc aaagattcta gtgaagaaaa       720
    ataccgtccg gtcaattagt caggtggaca gagcaggacc cggtgtcttg gaagcctcgt       780
    ccattcctct ggggaaggtg gggggggggcg tgtaatgcag ctctcaagaa gaaggtattt       840
    ttgttttcct ggagaaactg ccatcccagg agctgagagt ggatcagtag gaaggcctgt       900
    gacaggaagc agggaggttc agcng                                             925

<210> SEQ ID NO 2
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<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: 1- 554
<223> OTHER INFORMATION: n = g, a, c or t(u)
<400> SEQUENCE: 2

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    agccnggggtg cgganagcca gaccccaggc gtgggaaggg gagagagata gagcggccgg       120
    ttgggaagag gaggaccgtg gttnataaat aacagaaagc ccagagggac gtanccatcc       180
    gggatggaga gaggtaggga atccagntgt aagtcccaaa ctgccaccac cttcatnaga       240
    actgcttcgt gtaaggtcac gcaccgggcc agctgtccng agtggcggtc ctggcgtgtt       300
    aagttagcta aagtnactgc aactccgnct gtgcagactg ntcgtaaatt ctctctgtcc       360

```
        gccaaattct ccctcctatt aaactttca cttcctttca cttagtttcc tnacttcttt        420
        caaacggaag ctgtaactga gcctgccacc cnganacntt gtggttgcca tttttatgct        480
        aaagtaatcg tgtttttat gcctgtcaac tcccttttca tntaaagcag ggcntaccct        540
        attataactc tgcc                                                         554


<210> SEQ ID NO 3
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<212> TYPE: DNA
<213> ORGANISM: Rattus norvegicus
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<222> LOCATION: 1- 878
<223> OTHER INFORMATION: n = g, a, c or t(u)
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        ntggtngggg ggggagggac ncccacagan tcatgnggtg gttngggngg ngggcatcgt        180
        tnngatatta tcacattntg ngaanctatg tngggcttc ctttcngaca ggtggtggtt         240
        nnacangngg atgtgtgctt cttttttcag cagtggtgga cccggattct aagacccta         300
        cngtaacaat gccctnttt cctaagccta accagtcctt tangaggant gctcttgggn         360
        acccatgctg nntcacctag ccttggntca catnttnnac acaggaaaag gcagcatgtc        420
        ttntnggagc tcagcttatt cccttcccnt cccatccagn atctccctgg gntggatgag        480
        gtggatgacg catcttcaaa gcaccccacg tntcatggga tgtgcacagg agcttcgttg        540
        gaaatgtgtt gcgcgaccag gcttgtgtag gaaacaacag actactcgaa attaaagtcn        600
        taccttgcag ggttctcaga ggctttacg cattaataaa catttgaatc ntaagaaggg        660
        agcacagcat gtaatattnt tcaaattatc aggcnttgca accttcatta gtttctctta        720
        cgcagctggg ngtggtggtg tgtaccttta atctcagcac tgaggaggca cngatatctc        780
        catctctgtg acttccagac cggcntcgcc agagcaagtt ccaggccacc cagatgagat        840
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<211> LENGTH: 974
<212> TYPE: DNA
<213> ORGANISM: Rattus norvegicus
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: 1- 974
<223> OTHER INFORMATION: n = g, a, c or t(u)
<400> SEQUENCE: 4
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        aaaaacccnc ggattccggn nntcgggntt taanngnttt tttaanggcc cnaagncccn        120
        nttattgccg ncntttcccc cccgctnttg cnccccttta cttngagant ngtgntncna        180
        agatttnaag gttnttgccc ccccggcttt tnttcccctn nttttccccn nagntttaaa        240
        accggtntgg gttncnantt nnttgnancc nccnattggg gtttccgntt accngggttt        300
        ttccccatgn ccgttccctc caatnttgna cttcccnggt cngggtccna atnccnngna        360
        acngntcnan ccttattgac aattaatttt tccttgngna ntctgncccc cngnantttg        420
        gggttcttgg gngcagggcc ttttttttcnt tggnngcaan cncataaatn ttaccagntt        480
        gattgctaag gaagtancca tggttgngaa ccccccttn ttntctccca gatggaaccc        540
        aggattttgg aactgcagag gcttcaggt cttgggaagc ggaggcagnn aaagattgga        600
        gtgcactgtc cttttgcaat atggggtttg cctgcctgct ggctcntctc ctgctntntc        660
        agatggtgac tgaggctact tcngcaggac tnggaataat catgtccagg tggctgccct        720
        tccgagcaga aagggacaga cgtgggcga tgaagttgct atcgtttntt ttttttctg         780
        cacagactgc aaagtgtgca gaggggggga ggctgtgcaa aaaaaaaaa aaaaaaaaa         840
        aaaaaaaaaa ccgaggacgc agaagttaga ctgctgaccc atttggtgca tgtgtgccca        900
        tggagggagg ggaccttntt taaagggttc acgcggcacg cantgggnaa nngnnccnt         960
        acgnnnctcc caga                                                         974
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<210> SEQ ID NO 5
<211> LENGTH: 850
<212> TYPE: DNA
<213> ORGANISM: Rattus norvegicus
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: 1- 850
<223> OTHER INFORMATION: n = g, a, c or t(u)
<400> SEQUENCE: 5

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tgnggagntt ggngaccttn ttaccgnaan gagtgggaaa cgttttcctc cgggttnang     120
gttaggggga cccgnnggaa aattttaaaa ccnngngggc tttttcgaat taaggggaaa     180
ngcggtttng gtnnntgaag ggcgggnggt tggagtcnna gtccagagtt gatttccacc     240
cacaaatntg ggaggtgncg gggaatgntg ncnttttctt gngatgaggg ntgccgtncc     300
ggantaacag ngnttgcntt gtntngcnaa acgaagagtn tcctgnttgg aataggngtt     360
cngttcgang ganccagatt tangngntgg agnaaggatt nggcagataa angcntgaga     420
natgnancnt ggancaggtc nggncnnagn ntacagatga tgnncccana canganataa     480
ntncagatca cagtcgtacc cgnggctggg ccatgaanag ggcatcccca gacnnacaca     540
ngccttnana antgntcaga gaaccancag tggntanggg ntgcccnnnn naccagggaa     600
gacccggggc gtgncggata ttgacacanc agatnncatt tggggncggt tcgagggttn     660
atgntcnccg agtacnagan angatcntcc aacccggaat ncggtgctcc ngtcgtccga     720
tgnaatgagt cgnccggnaa cctcatatcc aagaaacnat acagcagtgg nntccgagtc     780
tcgtatantc nttgcgggng gaggctatnt tcagaggnca agattaccgt tagcgggana     840
aagtngaana                                                            850
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<210> SEQ ID NO 6
<211> LENGTH: 531
<212> TYPE: DNA
<213> ORGANISM: Rattus norvegicus
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: 1- 531
<223> OTHER INFORMATION: n = g, a, c or t(u)
<400> SEQUENCE: 6

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ngtctnntgt ctgtgtngtg cccctgtccn catctctcac nccagggaga gagatgtgag      120
ananacatca gagatctctn gnacagtgtt tcacaagagt ctatcncana gagcacatct      180
gcccggggng anacacaact ctaaatgtgt ctcanntgat ctctctnttg tgtctctnac      240
atatgnggac atgctctcag agtatnggnt ctcttgngcn cttntgcaca cacacacaca      300
cacacacaca cacacacaca cacncttctc tctggcacag ggntatggca nagcacatnt      360
tnngagntca nagctntata tgagtgtgtg gcgaaaggng tnatnananm gacnncccca      420
gcnnatatag gggggngnnc tctnggactc tcttnggnaa tntgnggggng agtctgcnca      480
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```

<210> SEQ ID NO 7
<211> LENGTH: 572
<212> TYPE: DNA
<213> ORGANISM: Rattus norvegicus
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: 1- 572
<223> OTHER INFORMATION: n = g, a, c or t(u)
<400> SEQUENCE: 7

```
tttttntgtg gcccttttaaa ctctgngtgn ccgtntnccc nagaggggg gtctcacaag       60
gagacancgg nnacacagag gtttgngnn tattgngagt ctctgcgcac nccananttt      120
aaccncgggg nctcntgttt tattttaaaa aaaaagagtc ncatgtntat ttctctnatg      180
tgaaaatcnc attcanagtt ntggggtttc ccntgaggag anatagagtt tcacactctt      240
```

```
      ctctccgagg ggtcntcnca tgtntctccc caatgtgngn ggnacacaca tgnggccccn        300
      aggggggtgng ctctctctgc ncagggcncc ccccaanang tagaganaca ntgtggtgtt        360
      tcacaacaca attcncgaga nattntgttc cncantggnn gtctnagntc ncatgttgtg        420
      gngacangtt agnncncccc atnttcnccc ccctttcaca ctgccccnag agagagaaan        480
      tctnggcccc ctctanannt nttttttaaat cnccccnnac cacaggtntt cccagggtat        540
      gngacntcnc cnnccccncn aaagatntgc nc                                      572


<210> SEQ ID NO 8
<211> LENGTH: 906
<212> TYPE: DNA
<213> ORGANISM: Rattus norvegicus
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: 1- 906
<223> OTHER INFORMATION: n = g, a, c or t(u)
<400> SEQUENCE: 8
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      gcgagaanac tctgtnnant ngtctccccc cncnccnaca gngtganant caaaacctct        120
      agagcccccc agaaancccc tntctcaaan aaagagaaag agaagancga gnagnagaga        180
      gananagaga gagagagtgt gganctntnt cctcngancc ccannnanan ngtgnggcnc        240
      actcncnngt gnngngnacc ccngggggatt tncgcgtgtc cccttgngct ctgtntanga        300
      gananatatg tntagtctct ctntcgcccc ctccgntgtc acgtgtgcgg ggcccnngag        360
      acacagacac ntctctcang gggaacacat anngactcnc acntgtgttt atattcnccc        420
      ctcccnctca cacanacaca cacacagnag atattnngct actctctctc tgtcacaggg        480
      gtacanattt antctnggcc anacccctct cngaagngng ggcanngtaa accccgcccc        540
      ctctcngaga angngagggc gntttacntt cccngtggcg tgtncgngcc cccgagactc        600
      cccttngnac cccccctntna accctctntt tgaacncaac ncaccntccc cnttttctcg        660
      gggnnggncc ngcncccnct ctcncaaaaa aaattnnaan ttngtccccct nccccnttnt        720
      ttcnggnana aaccgtgtcc gggggggggan nactctttt tgnccttaaa atcaanttt         780
      ttccccttttt ccnggggacc cccgnnttcc tttttaaaaa aaaanaaccc tttctcccttt        840
      ttaaaagnac ccnttttttc naaaaccgtt ccgnatttaa ttcctaaatt cccttccccn        900
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<210> SEQ ID NO 9
<211> LENGTH: 914
<212> TYPE: DNA
<213> ORGANISM: Rattus norvegicus
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: 1- 914
<223> OTHER INFORMATION: n = g, a, c or t(u)
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      gactcccatc tctntntntn cccccaganc tggngaacgg ngtgtggnga nccntntctg        120
      ttctcnantc tctaaaagng cnaaaagcgc ananacacgn gcctctctat anatctcacg        180
      tgtcccnngn nctctcngac ccctnntctg tntgagagac accctntctc aaaatatagt        240
      gtacacgngc tttgnggctc tcccctttttc tctccactnt tgagngngaa acgcggngtt        300
      ntctctgaga tgtaganagn gtcccctnct cnatatatgt gttncccact ccnnagggng        360
      tctcataaaa atcncntntc tcaacaccac cncctcnacc ccccncacga gaacacntcn        420
      ccaccncnan gacacaaana naaggngtnn anaaccccan aaaaactnng ntntcngntt        480
      tacacacaca cacacncacn ctcncncaca ccccacnna aatgggagaa aaaacagaga        540
      ggngtgggtg ttngnntcaa caccntntta cctctctgnt gnnanttgag aaaatatttc        600
      tntncttacc cctctccccct ctctgtgtgt ngannatatc ngntctagat gtcctnaccc        660
      tccccaaacc tttctcnggn agagacntct ctntnttttt ccccncttc catttgaaan        720
      anangagaag gnccaaaaag gngggngtct tctcggaat ncnccctttt ggcccccaa         780
      cctgggtttt tttccccctt cctttttaatn antttttcna nacaaancttt tnngngtttn        840
      ggaaaangcc tttnnctgnn nnttttttttcc cttcccctttt tnnangggnt tccccccccc        900
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          ccngaatttt tttt                                                  914


<210> SEQ ID NO 10
<211> LENGTH: 400
<212> TYPE: DNA
<213> ORGANISM: Rattus norvegicus
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<222> LOCATION: 1- 400
<223> OTHER INFORMATION: n = g, a, c or t(u)
<400> SEQUENCE: 10
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          gtgagatata tgtgattctg tggtggtgtt ctcagagggg gtttgggtta ttggggataa    180
          tagtttgccc ctcgcggggt ctatatttat atatgtgaca caatatatta gagagatttt    240
          tggttatata tatttccctt cgcgggggtg gagatttatc acaggggggag agctttttccc    300
          ttgttagcaa aagtccctgg tctcgtcccc catctcccaa aaaaaaaaaa atgtgaaaaa    360
          aaaaaaaaaa agggcccctc ttgagtgatg tccccttctt                          400


<210> SEQ ID NO 11
<211> LENGTH: 880
<212> TYPE: DNA
<213> ORGANISM: Rattus norvegicus
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: 1- 880
<223> OTHER INFORMATION: n = g, a, c or t(u)
<400> SEQUENCE: 11
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          cgaaatttta aaaaccgtcg ttagaggaaa tgaaggttca gccgaccatt acctganagt    180
          aatgaaggtn ttccggaggg ttgccttcca atcccagatg gatttgagtt tcaggatcaa    240
          ttcagttacc gntgaccatc caccnncctc cngtataatc attngatgag gatgaatggt    300
          gagtgagtga tgatgatgat gatgatgatg aagggatgag aagnacacta tgataacaag    360
          tgtctcagtc cacattaagg tttgcctgna aattagtgca taagccatgg gagacaaatt    420
          cttttcnnac acaattaata gtntcttant ccttcccatc ttctctgccc cattctgttt    480
          tccaccacag gtctgcagcg ggctacagct tccagtctcc aagcaaatac cagaactgga    540
          ggagaaaatt ccagtccagt gagtcatggg caggggggagg ggtggggtaa gggcagtggc    600
          gctcattcct nacatggtgt cttctcttgc ctagcctggg atctgagggc aagagaacct    660
          gtaagcttga tttgatttcc actgctgact ggagtcactg ccaagggatt tgggacttct    720
          ccatctctct ctctaacctg aaatccttag gattctatta tttcaccgga ccagagctgt    780
          agcagagatg agctccaagt ttgaaatgag aaagggggaaa ttgagagcta tgagctaggn    840
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<210> SEQ ID NO 12
<211> LENGTH: 909
<212> TYPE: DNA
<213> ORGANISM: Rattus norvegicus
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: 1- 909
<223> OTHER INFORMATION: n = g, a, c or t(u)
<400> SEQUENCE: 12
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          nagacggtgc nnggggggga ggggcaggag nggnagagag gcangagngg agngggggaca    180
          agcnnaaanc gaggaggnan gangngangg nnggngngnc gaaggcgcnn aagnnggtcg    240
```

```
        gngagcggna gnggnnaaac tggggaacga gacagacggc cccnncggng gcangnggga        300
        gagnnncgcc agngagagna gncagnanca gancanggga gggggggggan ncacnggcgg        360
        gagggncgan gacggnnngn annggnnaga ggcannnnnc gccnanagng ngaagngagg        420
        cangagtgnc gcnngagnag acaggcccgc gcnccggggg cagacnnngg ncaccaccga        480
        gggtgggngg ggcncggaga naagaccaga ggnnngaggg cganggcnng ggtnngcccg        540
        ggccncccna aaaaaannnc gaaaaaaaan aaggggcgcn gcnggcnggg ggaggagcgc        600
        ntnncgtang tngantgacg gaggccngna atngggccgn gccannagg ggcgnagagg         660
        cccaagngcg gnaggngnaa gnanagancc ngnnggtngg gagngangagn gcnggnncc       720
        naccccngn gttganggcn cccacgncgg ngcaggccgn nnaaagngag tcccnaaaa         780
        nntcgnggtn tnacancgnc ccggggncgc cgcngngtcc cgncacacng gannncggag        840
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        gaaaaagnc                                                                909


<210> SEQ ID NO 13
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<212> TYPE: DNA
<213> ORGANISM: Rattus norvegicus
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: 1- 927
<223> OTHER INFORMATION: n = g, a, c or t(u)
<400> SEQUENCE: 13
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        ncccnggggg gggggnttnt ccagggaant aaaanggtgn gttggggggn aaaaatttat        120
        tttnaaaaag ggcgnccnat ataaangacn ttcggggggg tttgaanagg gccggaancn        180
        tcgacgggtt tccgggnggg ganaaggana agggnacgca cgggatttct tnccctttt          240
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        nggngccagg aaattggcct gtccaaaatt cttttcccng cttttaagac aggcaggtat         420
        tatttggcag caggttatta cnataggnaa gtaaataaca atgggtaagt gcctggcaca         480
        ggccagggta agtagggcat gtatggaatg ttaaacatta cccttcatcc tgagaaanaa         540
        aanacaagna anaaaggctg gtctcacata tcccaaagct ttatcttcnt aggtgcccca         600
        tggtgaacgt taagccaagc ntatgantca caagggacga catgggcagg ntagggtaca        660
        gaatcagtgn tcagagactc caggggcacc cctgattccc tttgctgtca cacagacact        720
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        tgggacactc ntcgtggtag cacacattcc tcagtcagct tctgagcntc agggtcccag        840
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